necting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: SSPTALAH1625

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Web Page URLs for STN Seminar Schedule - N. America
NEWS 1
                "Ask CAS" for self-help around the clock
NEWS 2
NEWS 3 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 4 OCT 03 MATHDI removed from STN
NEWS 5 OCT 04 CA/Caplus-Canadian Intellectual Property Office (CIPO) added
                to core patent offices
NEWS 6 OCT 13 New CAS Information Use Policies Effective October 17, 2005
               STN(R) AnaVist(TM), Version 1.01, allows the export/download
NEWS 7 OCT 17
                of CAplus documents for use in third-party analysis and
                visualization tools
NEWS 8 OCT 27 Free KWIC format extended in full-text databases
NEWS 9 OCT 27
                DIOGENES content streamlined
NEWS 10 OCT 27
                EPFULL enhanced with additional content
NEWS 11 NOV 14
                CA/CAplus - Expanded coverage of German academic research
NEWS 12 NOV 30
                REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                spectral property data
NEWS 13 DEC 05 CASREACT(R) - Over 10 million reactions available
NEWS 14
        DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
        DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 15
NEWS EXPRESS DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
             CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
             AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
```

V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT http://download.cas.org/express/v8.0-Discover/

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information

NEWS - LOGIN -- Welcome Banner and News Items -

NEWS PHONE Direct Dial and Telecommunication Network Access to STN

NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 10:46:38 ON 14 DEC 2005

=> file reg COST IN U.S. DOLLARS

SINCE FILE ENTRY SESSION 0.21 0.21

TOTAL.

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 10:46:49 ON 14 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 DEC 2005 HIGHEST RN 869843-02-7 DICTIONARY FILE UPDATES: 13 DEC 2005 HIGHEST RN 869843-02-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

******************* * The CA roles and document type information have been removed from * * the IDE default display format and the ED field has been added, * effective March 20, 2005. A new display format, IDERL, is now * available and contains the CA role and document type information. * ******************

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10764229.str

L1STRUCTURE UPLOADED

=> s 11 sam SAMPLE SEARCH INITIATED 10:47:12 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -31 TO ITERATE

100.0% PROCESSED 7 ANSWERS 31 ITERATIONS SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE** PROJECTED ITERATIONS: 286 TO 7 TO PROJECTED ANSWERS: 298

L27 SEA SSS SAM L1 => file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.43 0.64

FILE 'CAPLUS' ENTERED AT 10:47:18 ON 14 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 14 Dec 2005 VOL 143 ISS 25 FILE LAST UPDATED: 13 Dec 2005 (20051213/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s 11 full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 10:47:22 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 667 TO ITERATE

100.0% PROCESSED 667 ITERATIONS SEARCH TIME: 00.00.01

167 ANSWERS

L3 167 SEA SSS FUL L1

L4 7 L3

=> d ibib abs hitstr total

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:510348 CAPLUS

DOCUMENT NUMBER:

143:193927

TITLE:

Practical application of new catalytic methods: a concise synthesis of a potent PDE IV inhibitor

AUTHOR(S):

Albaneze-Walker, Jennifer; Murry, Jerry A.; Soheili, Arash; Ceglia, Scott; Springfield, Shawn A.; Bazaral,

SOURCE:

Charles; Dormer, Peter G.; Hughes, David L. CORPORATE SOURCE:

Process Research, Merck Research Laboratories, Merck

and Co., Inc., Rahway, NJ, 07065, USA

Tetrahedron (2005), 61(26), 6330-6336

CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal English LANGUAGE:

CASREACT 143:193927 OTHER SOURCE(S):

GI

AB An efficient synthesis of a potent PDE IV inhibitor I is described. synthesis is highlighted by two practical and efficient catalytic reactions: a highly selective catalytic palladium mediated carbonylation of the pyridine side chain and an efficient palladium-catalyzed Suzuki-Miyaura coupling of a chloropyridine-N-oxide.

ΙT 477252-51-0P

> RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(scalable preparation of (cyclopropylcarbamoyl) (oxidopyridylphenyl) naphthyri done as PDE IV inhibitor using regioselective carbonylation and Suzuki-Miyaura cross-coupling as key steps)

RN 477252-51-0 CAPLUS

1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1059128 CAPLUS

DOCUMENT NUMBER: 142:32997

TITLE: Use of phosphatase inhibitors as adjunct therapy for

psychiatric disorders

INVENTOR(S): Scolnick, Edward M.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE: PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATEN	KIND		DATE			APPL	I CAT	DATE								
WO 2004105698 WO 2004105698			A2 A3	A2 20041209 A3 20050602			1	WO 2	004-	20040525						
W	: AE, CN, GE, LK, NO, TJ, W: BW, AZ, EE,	AG, CO, GH, LR, NZ, TM,	CR, GM, LS, OM, TN, GM, KG, FI, TR,	AM, CU, HR, LT, PG, TR, KE, KZ,	AT, CZ, HU, LU, PH, TT, LS, MD, GB,	AU, DE, ID, LV, PL, TZ, MW, RU, GR,	AZ, DK, IL, MA, PT, UA, MZ, TJ,	DM, IN, MD, RO, UG, NA, TM, IE,	DZ, IS, MG, RU, US, SD, AT, IT,	EC, JP, MK, SC, UZ, SL, BE, LU,	EE, KE, MN, SD, VC, SZ, BG, MC,	EG, KG, MW, SE, VN, TZ, CH, NL,	ES, KP, MX, SG, YU, UG, CY, PL,	FI, KR, MZ, SK, ZA, ZM, CZ, PT,	GB, KZ, NA, SL, ZM, ZW, DE, RO,	GD, LC, NI, SY, ZW AM, DK, SE,

PRIORITY APPLN. INFO.:

US 2003-474168P P 20030529

- AB The use of a phosphatase inhibitor in conjunction with psychotherapy provides enhanced therapeutic results in the treatment of psychiatric disorders including, for example, specific phobias, panic disorders, anxiety disorders including posttraumatic stress disorders, and obsessive-compulsive disorder. The phosphatase that is inhibited can be calcineurin or protein phosphatase 1. Treatment with a phosphatase inhibitor can be combined with a phosphodiesterase 4 inhibitor.
- TT 701263-25-4P, N-Cyclopropyl-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]-1,4-dihydro-1,8-naphthyridine-3-carboxamide 702640-57-1P 702640-64-0P
 - -RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; use of phosphatase inhibitors such calcineurin and protein phosphatase 1 as adjunct therapy for psychiatric disorders combined with phosphodiesterase 4 inhibitors)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (9CI) (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT **702639-56-3P**, 2-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]-2-methylpropanoic acid 702639-58-5P 702639-59-6P 702639-63-2P, 2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)yl]-3-fluoro-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid 702639-69-8P, 2-trans-[3-Chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid 702639-71-2P, 2-cis-[3'-[3-[(Cyclopropylamino)carbonyl]-4oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro-1,1'-biphenyl-4yl]cyclopropanecarboxylic acid 702639-90-5P, (+)-trans-2-[3-Fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid 702639-91-6P 702639-93-8P, trans-2-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4yl]-2-methylcyclopropanecarboxylic acid 702639-95-0P, 2-trans-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)yl]-1,1'-biphenyl-4-yl]cyclopropanecarboxylic acid 702639-96-1P, 3-Methyl-3-[3'-[4-oxo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8naphthyridin-1(4H)-yl]biphenyl-4-yl]butanoic acid 702639-98-3P 702640-04-8P, (+)-trans-2-[3-Chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]biphenyl-4yl]cyclopropanecarboxylic acid 702640-06-0P, . . . (-)-trans-2-[3'-[4-0xo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8naphthyridin-1(4H)-yl]biphenyl-4-yl]cyclopropanecarboxylic acid 702640-13-9P, 3-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8naphthyridin-(4H)-yl]biphenyl-4-yl]-2,2-dimethylpropanoic acid 702640-28-6P, 4-[3'-[3-[(Cyclopropylamino)carbonyl]-4-oxo-1,8naphthyridin-(4H)-yl]biphenyl-4-yl]-3,3-dimethylbutanoic acid 702640-30-0P, 1-[[3'-[4-0xo-3-[[(2,2,2trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]biphenyl-4yl]methyl]cyclobutanecarboxylic acid 702640-35-5P, 2,2-Dimethyl-4-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8naphthyridin-1(4H)-yl}biphenyl-4-yl]butanoic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(use of phosphatase inhibitors such calcineurin and protein phosphatase

1 as adjunct therapy for psychiatric disorders combined with

phosphodiesterase 4 inhibitors)

RN 702639-56-3 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- β , β -dimethyl- (9CI) (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, β , β -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$Me$$
 Me
 Me
 N
 N
 N
 $C-NH-CH_2-CF_3$

RN 702639-98-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-{3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl}[1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- β , β -dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-CH_2-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

RN 702640-35-5 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, α,α -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{C}-\text{CH}_2-\text{CH}_2 \\ \text{Me} \\ \end{array}$$

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:467891 CAPLUS

DOCUMENT NUMBER:

141:38597

TITLE:

Preparation of aryl substituted 1,8-naphthyridin-4(1H)-

ones as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Murry, Jerry Anthony;

Soheili, Arash; Springfield, Shawn A.

PATENT ASSIGNEE(S):

SOURCE:

Merck & Co., Inc., USA

PCT Int. Appl., 142 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA'	PATENT NO.						KIND DATE			APPLICATION NO.						DATE				
									WO 2	003-	US36	806	20031118							
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
								DK,												
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,			
								MD,												
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,			
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW					
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,			
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,			
		ES,	FI,	FR,	GB,	GR,	ΗU,	IE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,			
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
CA	CA 2506656					AA 20040610				CA 2	0.03-	2506	65.6	20031118						
EP	EP 1565466					A2 20050824				EP 2	003-	7836	36	20031118						
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,			
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK				
											BR 2003-16464									
NO	NO 2005003047					A 20050810				NO 2005-3047										
PRIORIT	IORITY APPLN. INFO.:									US 2	002-	4283	15P		P 2	0021	122			
								US 2003-472655P					P 20030522							
										WO 2	003-	US36	806	1	W 2	0031	118			
OTHER S					MARPAT 141:38597															

GI

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB In one aspect, the present invention is directed to a one pot method of preparing intermediates I [OR1 = a suitable leaving group; R3 = (un)substituted alkyl, aryl, heteroaryl], which are useful in making inhibitors of phosphodiesterase-4. The present invention is also directed to a method of preparing phosphodiesterase inhibitors (no biol. data given) comprising the compds. II and III which comprises reacting IV [OR1 as above] with a 3-bromopyridine-N-oxide.HCl or 3-bromopyridine in the presence of a palladium catalyst and a phosphine ligand in amine base followed by reaction of the resulting V or VI with cyclopropylamine, optionally in the presence of catalyst. Thus, reacting IV [R1 = Et] with a 3-bromopyridine-N-oxide.HCl in the presence of [(allyl)PdCl]2, P(tert-Bu)3, tert-amylamine in DMAc followed by reacting V [R1 = Et] with cyclopropylamine afforded II. Preparation of 77 aryl substituted 1,8-naphthyridin-4(1H)-ones and their intermediates is also described.

IT 477251-83-5P 477251-87-9P 477251-92-6P 477251-93-7P 477251-95-9P 477251-97-1P 477251-99-3P 477252-00-9P 477252-01-0P 477252-05-4P 477252-08-7P 477252-09-8P 477252-11-2P 477252-23-6P 477252-25-8P 477252-26-9P 477252-31-6P 477252-32-7P 477252-36-1P 477252-43-0P 694489-52-6P 701977-61-9P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors of phosphodiesterase-4)

RN 477251-83-5 CAPLUS

CN

RN

1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 701977-61-9 CAPLUS

CN [1,1'-Biphenyl]-3-carboxylic acid, 3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-, ethyl ester (9CI) (CA INDEX NAME)

```
IT
     477251-76-6P 477251-82-4P 477251-84-6P
     477251-85-7P 477251-88-0P 477251-89-1P
     477251-94-8P 477252-02-1P 477252-03-2P
     477252-04-3P 477252-06-5P 477252-10-1P
     477252-12-3P 477252-13-4P 477252-14-5P
     477252-15-6P 477252-16-7P 477252-17-8P
     477252-21-4P 477252-22-5P 477252-24-7P
     477252-27-0P 477252-28-1P 477252-30-5P
     477252-33-8P 477252-34-9P 477252-35-0P
     477252-37-2P 477252-38-3P 477252-39-4P
     477252-40-7P 477252-41-8P 477252-44-1P
     477252-46-3P 477252-47-4P 477252-48-5P
     477252-49-6P 477252-50-9P 477252-51-0P
     477252-53-2P 477252-54-3P 477252-55-4P
     477252-56-5P 477252-57-6P 477252-58-7P
     477252-59-8P 477252-60-1P 477252-61-2P
     477252-62-3P 477252-63-4P 477252-64-5P
     477252-65-6P 694489-50-4P 694489-58-2P
     701977-62-0P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of aryl substituted 1,8-naphthyridin-4(1H)-ones as inhibitors
        of phosphodiesterase-4)
RN
     477251-76-6 CAPLUS
     1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
CN
     dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)
```

RN 477251-82-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N=(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (9CI) (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(9CI)(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (9CI) (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-

1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 701977-62-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:467889 CAPLUS

DOCUMENT NUMBER:

141:38596

TITLE:

Preparation of biphenylnaphthyridonecarboxamides as

phosphodiesterase-4 inhibitors

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick; Aspiotis, Renee; Dube, Laurence; Girard, Yves;

MacDonald, Dwight

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

SOURCE:

GΙ

PCT Int. Appl., 116 pp. CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					D	DATE		APPLICATION NO.				DATE					
WO	WO 2004048374				A1 2004		0610	10 WO 2003-CA1800						20031119				
	W:	AE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	KZ,	LC,	LK,	
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	
		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
CA	CA 2506648				AA 20040610			CA 2003-2506648					20031119					
EP	1565464				A 1	A1 20050824			EP 2003-775029					20031119				
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
BR	BR 2003016458					A 20051011				BR 2003-16458					20031119			
					A1 20050519				US 2004-764229				20040123					
NO	NO 2005003046				A 20050727				NO 2005-3046									
PRIORITY APPLN. INFO.:								US 2002-428611P										
								WO 2003-CA1800					1	W 20031119				
OTHER S	OTHER SOURCE(S):				MARPAT 141:38596													

AB Title compds. [I; Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolyl, thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl; Y = CO2R4, ACO2R4, etc.; A = alkyl; R, R4 = H, alkyl; R1 = H, (substituted) alkyl, cycloalkyl, alkoxy, alkenyl, alkynyl, heteroaryl, heterocyclyl; R2 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl, alkoxy, Ph, heteroaryl,

```
amino, etc.; R3 = H, halo, cyano, NO2, (substituted) alkyl, cycloalkyl,
    etc.], were prepared Thus, title compound (II) (preparation outlined)
inhibited
     PDE4-mediated hydrolysis of cAMP to AMP with IC50 = 0.1 nM.
IT
     702639-52-9P 702639-53-0P 702639-54-1P
     702639-55-2P 702639-56-3P 702639-57-4P
    702639-58-5P 702639-59-6P 702639-60-9P
    702639-61-0P 702639-62-1P 702639-63-2P
    702639-64-3P 702639-65-4P 702639-66-5P
    702639-67-6P 702639-69-8P 702639-71-2P
    702639-73-4P 702639-74-5P 702639-76-7P
     702639-78-9P 702639-80-3P 702639-81-4P
     702639-83-6P 702639-85-8P 702639-86-9P
     702639-88-1P 702639-90-5P 702639-91-6P
     702639-93-8P 702639-95-0P 702639-96-1P
    702639-98-3P 702640-00-4P 702640-02-6P
     702640-04-8P 702640-06-0P 702640-08-2P
     702640-10-6P 702640-12-8P 702640-13-9P
     702640-15-1P 702640-16-2P 702640-17-3P
     702640-18-4P 702640-19-5P 702640-20-8P
     702640-21-9P 702640-22-0P 702640-23-1P
     702640-24-2P 702640-25-3P 702640-26-4P
     702640-27-5P 702640-28-6P 702640-29-7P
     702640-30-0P 702640-31-1P 702640-32-2P
     702640-33-3P 702640-34-4P 702640-35-5P
     702640-36-6P 702640-37-7P 702640-38-8P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (claimed compound; preparation of biphenylnaphthyridonecarboxamides as
        phosphodiesterase-4 inhibitors)
     702639-52-9 CAPLUS
RN
CN
     Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-
     1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA
     INDEX NAME)
```

RN 702639-53-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-54-1 CAPLUS

CN [1,1'-Biphenyl]-3-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

RN 702639-55-2 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

RN 702639-56-3 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\beta$, β -dimethyl- (9CI) (CA INDEX NAME)

RN 702639-57-4 CAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, $3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-<math>\alpha$ -hydroxy- (9CI) (CA INDEX NAME)

RN 702639-58-5 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 702639-59-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-60-9 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

RN 702639-61-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 702639-62-1 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

RN 702639-63-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

RN 702639-64-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-65-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 702639-66-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-67-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-((cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-2-methyl[1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

RN 702639-69-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-71-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, (1R,2S)-rel-(9CI) (CA INDEX NAME)

RN 702639-73-4 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

RN 702639-74-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-(4-morpholinylcarbonyl)-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 702639-76-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-78-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

RN 702639-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylsulfonyl)ethyl]amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-81-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 702639-83-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[5-[3-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-2-thienyl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-85-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 702639-86-9 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyanocyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-88-1 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, β,β-dimethyl-3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & & \\ \text{Me} & & \\ \text{Me} & & \\ \text{Me} & & \\ \text{N} & & \\ \text{N} & & \\ \text{O} & & \\ \text{C-NHPr-i} \\ \end{array}$$

RN 702639-90-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702639-91-6 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

RN 702639-93-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-

1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2-methyl-, (1R,2R)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-95-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702639-96-1 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, β , β -dimethyl-3'-[4-oxo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$Me$$
 Me
 N
 N
 $C-NH-CH_2-CF_3$

RN 702639-98-3 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-00-4 CAPLUS
CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,3,3,3-pentafluoropropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CL) (CA INDEX NAME)

RN 702640-02-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-1-fluoro-, (1R,2S)-rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-04-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-06-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-08-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-10-6 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1-methylethyl ester, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-12-8 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-α,α-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 702640-13-9 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me & & \\ HO_2C-C-CH_2 & & \\ Me & & N & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

RN 702640-15-1 CAPLUS

CN [1,1'-Biphenyl]-3-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

RN 702640-16-2 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-3-yl]methyl]- (9CI) (CA INDEX NAME)

RN 702640-17-3 CAPLUS

CN [1,1'-Biphenyl]-2-propanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

RN 702640-18-4 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-2-yl]methyl]- (9CI) (CA INDEX NAME)

RN 702640-19-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1,1-dimethylethyl)amino]carbonyl]-

4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-(9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-20-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclobutylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-21-9 CAPLUS

CN Bicyclo[1.1.1]pentane-1-carboxylic acid, 3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 702640-22-0 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- γ -hydroxy- γ -methyl- (9CI) (CA INDEX NAME)

$$HO_2C-CH_2-CH_2-C$$
 Me
 N
 N
 N
 O
 C
 N

RN 702640-23-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1R,2S)-2-fluorocyclopropyl]amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-24-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(dicyclopropylmethyl)amino]carbony

Rotation (+). Absolute stereochemistry unknown.

RN 702640-25-3 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- α , α -dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2-CH_2 \\ Me \\ \end{array}$$

RN 702640-26-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-hydroxycyclopropyl)amino]carbon
yl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-,
(1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-27-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(1-phenylcyclopropyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-28-6 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]- β , β -dimethyl- (9CI) (CA INDEX NAME)

RN 702640-29-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-cyclopropyl-1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-30-0 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{CO}_2\text{H} \\ \hline \\ \text{CH}_2 \\ \hline \\ \text{N} \\ \hline \\ \text{N} \\ \hline \\ \text{C}-\text{NH}-\text{CH}_2-\text{CF}_3 \\ \hline \\ \text{O} \\ \\ \text{O} \\ \end{array}$$

RN 702640-31-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(cyclopropylmethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)-

(9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-32-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[3-[[(1-hydroxycyclopropyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-33-3 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoro-1-methylethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel- (9CI) (CA INDEX NAME)

RN 702640-34-4 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[(1-methylcyclopropyl)amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-35-5 CAPLUS

CN [1,1'-Biphenyl]-4-butanoic acid, α,α -dimethyl-3'-[4-oxo-3-[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{C}-\text{CH}_2-\text{CH}_2 \\ \text{Me} \\ \end{array}$$

RN 702640-36-6 CAPLUS

CN [1,1'-Biphenyl]-4-propanoic acid, α , α -dimethyl-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Me \\ HO_2C-C-CH_2 \\ Me \\ \end{array}$$

RN 702640-37-7 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-chloro-3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN 702640-38-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

IT 702640-46-8P

ΙT

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biphenylnaphthyridonecarboxamides as phosphodiesterase-4 inhibitors)

RN 702640-46-8 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, (1R,2R)-rel-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

RN

702640-62-8 702640-64-0 702640-66-2
702640-70-8 702640-74-2 702640-76-4
702640-77-5 702640-79-7
RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of biphenylnaphthyridonecarboxamides as phosphodiesterase-4 inhibitors)
701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (9CI) (CA INDEX NAME)

RN 702640-57-1 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-59-3 CAPLUS

CN 1,3-Dioxolane-4-carboxylic acid, 5-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 702640-62-8 CAPLUS

CN Cyclopropanecarboxylic acid, 1-cyano-3-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-2,2-dimethyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 702640-64-0 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-3-fluoro[1,1'-biphenyl]-4-yl]-, methyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-66-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-bromo-5'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-70-8 CAPLUS

CN [1,1'-Biphenyl]-4-carboxylic acid, 3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 702640-74-2 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3'-[3-[[[2-(methylthio)ethyl]amino]carbony 1]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, ethyl ester, (1R,2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 702640-76-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (9CI) (CA INDEX NAME)

RN 702640-77-5 CAPLUS

CN Cyclopropanecarboxylic acid, 2-[3-fluoro-3'-[4-oxo-3-[[(2,2,2-

trifluoroethyl)amino]carbonyl]-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4yl]-, methyl ester, (1R,2R)-rel-(+)- (9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

RN 702640-79-7 CAPLUS

CN Cyclobutanecarboxylic acid, 1-[[3'-[3-[(cyclopropylamino)carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:467741 CAPLUS

DOCUMENT NUMBER:

141:38595

TITLE:

Preparation of substituted naphthyridine

phosphodiesterase-4 inhibitors as enhancers of

cognition

INVENTOR(S):

Dube, Daniel; Gallant, Michel; Lacombe, Patrick; Girard, Yves; MacDonald, Dwight; Friesen, Richard; Ducharme, Yves; Cote, Bernard; Blouin, Marc; Martins,

Evelyn; Guay, Daniel; Girard, Mario; Frenette, Richard; Laliberte, Sebastien; Robichaud, Annette;

Mastracchio, Anthony; Perrier, Helene

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.; Hamel, Pierre

SOURCE: PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.					KIN	D :	DATE		APPLICATION NO.						DATE			
	WO 2004047836				A1			20040610		WO 2003-CA1799					20031119				
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,	
			GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	TJ,	TM,	TN,	
			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
				•	•	•		HU,	•		-	-		-	-			•	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	EP 1592419					A1 20051109				EP 2003-776698					20031119				
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	ΝL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR,	BG,	CZ,	EE,	HU,	SK		
PRIORITY APPLN. INFO.: US 2002-428541P																			
WO 2003-CAI										CA17	99	1	W 20031119						

AB Substituted naphthyridines are prepared as PDE-4 inhibitors. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate (preparation given) is treated with NaH in THF to give Et 1-(3-bromophenyl)-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxylate. This intermediate is saponified, coupled to i-PrNH2 (THF, Et3N, i-BuOCOC1) and coupled to 3-acetylphenylboronic acid (PhMe, EtOH, Na2CO3, trans-dibromobis(triphenylphosphine)palladium, reflux, 1 h) to give I. Example compds. have IC50 values of 0.1 to 90.0 nM for PDE4; these compds. are useful for enhancing memory, learning, retention, recall, awareness and judgement.

IT 477251-83-5P, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-87-9P,

```
N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-
3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3-yl]
(pyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477251-92-6P 477251-93-7P, N-Isopropyl-1-[3-(quinolin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477251-95-9P, N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-97-1P,
N-Isopropyl-1-[3-[5-(methylsulfanyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-99-3P,
N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-00-9P,
N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-01-0P, N-Cyclopropyl-1-[3-[4-
(ethylsulfanyl)phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-05-4P, N-Isopropyl-1-[3-[4-
(methylsulfanyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-07-6P, N-Isopropyl-1-[3-(5-carboethoxypyridin-
3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-08-7P, N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-
3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-09-8P, N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-10-1P 477252-11-2P, N-Isopropyl-1-[3-(6-
methylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-23-6P, N-Cyclopropyl-1-[3-(6-methylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-25-8P, N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-26-9P,
N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-31-6P,
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-32-7P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3-
yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-
4-one-3-carboxamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (preparation of substituted naphthyridine phosphodiesterase-4 inhibitors as
   enhancers of cognition)
477251-83-5 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)
```

RN

CN

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-91-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

ΙT 477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-80-2p, N-(2,6-Dichloropyridin-4-yl)-1-[3-(3-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-82-4P 477251-84-6P, N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-85-7P, N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-88-0P, N-Isopropyl-1-[3-(indol-5-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4acetylphenyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-02-1P, N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4sulfamoylphenyl] -1, 4-dihydro[1,8] naphthyridin-4-one-3-carboxamide 477252-04-3P, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-06-5P, N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-12-3P, N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-13-4P. 1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-1,4dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-14-5p 477252-15-6P, N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-16-7P, N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)pyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1methylethyl)-1-oxidopyridin-4-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4one-3-carboxamide 477252-21-4P, N-Cyclopropyl-1-[3-(6isopropylsulfonylpyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3carboxamide 477252-22-5P, N-Cyclopropyl-1-[3-(6-methoxypyridin-3yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide

```
477252-24-7p, N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-
3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-27-0P, N-Cyclopropyl-1-[3-[6-(bis(cyclopropyl)(hydroxy)meth
yl)-1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-28-1P, N-Cyclopropy1-1-[3-[5-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-
one-3-carboxamide 477252-30-5P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-
1-methylethyl)pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide 477252-34-9P 477252-36-1P,
N-Isopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-37-2P,
N-Cyclopropyl-1-[3-[4-(ethylsulfonyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-38-3P,
N-Cyclopropyl-1-[3-[4-(ethylsulfinyl)phenyl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-39-4P
477252-40-7P 477252-41-8P, N-Cyclopropyl-1-[3-[4-
[(methylsulfonyl)methyl]phenyl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-
3-carboxamide 477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-
oxopyridin-3-yl)phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-y1)-1-[3-(1-oxidopyridin-3-y1)pheny1]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-51-0P,
N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-57-6P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-58-7P,
N-Isopropyl-1-[3-(1-oxidoquinolin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-59-8P,
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-60-1P,
N-Cyclopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-61-2P,
N-Cyclopropyl-1-[3-(6-methylsulfonyl-1-oxidopyridin-3-yl)phenyl]-1,4-
dihydro[1,8]naphthyridin-4-one-3-carboxamide 477252-62-3P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-carboxamide
477252-63-4P, N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-
1-oxidopyridin-3-yl]phenyl]-1,4-dihydro[1,8]naphthyridin-4-one-3-
carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
```

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted naphthyridine phosphodies terase-4 inhibitors as enhancers of cognition)

RN 477251-76-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-80-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-82-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (9CI) (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-

yl)-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

$$H_2N-S$$
 O
 N
 N
 O
 C
 C
 N

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(9CI)(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (9CI) (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

REFERENCE COUNT:

11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:433770 CAPLUS

DOCUMENT NUMBER:

141:7041

TITLE:

One-pot preparation of naphthyridine derivatives,

useful as inhibitors of phosphodiesterase-4

INVENTOR(S):

Albaneze-Walker, Jennifer; Ceglia, Scott; Murry, Jerry

Anthony; Soheili, Arash

PATENT ASSIGNEE(S): Merck & Co., Inc., USA

SOURCE:

U.S. Pat. Appl. Publ., 57 pp., which

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	AP	PLICATION NO.	DATE		
US 2004102472	Al	20040527	US	2003-690118		20031021	
US 6909002	B2	20050621					
PRIORITY APPLN. INFO.:			US	2002-428315P	P	20021122	
			US	2003-472598P	P	20030522	
OTHER SOURCE(S):	CASREA	CT 141:7041;	MA	RPAT 141:7041			

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to one-pot preparation of naphthyridine derivs. of formula I [wherein: OR1 is a suitable leaving group; R2 is C1-8alkyl, (un)substituted (hetero)aryl], useful as inhibitors of phosphodiesterase-4 (no biol. data). For instance, naphthyridine derivative II was prepared via heterocyclization of Et 2-chloronicotinoylacetate, 3-bromoaniline, and acetic anhydride, hydrolysis of the obtained ester III (R3 = Br), amidation by isopropylamine, and subsequent phenylacetylation by 3-acetylphenylboronic acid (example 1, no yield data). Naphthyridine derivative IV was prepared using the prepared intermediate III [R3 = -B(OH)2]

(p.

49-53).

IT 477252-05-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

IT 477251-76-6P 477251-82-4P 477251-83-5P 477251-84-6P 477251-85-7P 477251-87-9P 477251-88-0P 477251-89-1P 477251-92-6P

```
477251-93-7P 477251-94-8P 477251-95-9P
     477251-97-1P 477251-99-3P 477252-00-9P
     477252-01-0P 477252-02-1P 477252-03-2P
     477252-04-3P 477252-06-5P 477252-07-6P
     477252-08-7P 477252-09-8P 477252-10-1P
     477252-11-2P 477252-13-4P 477252-14-5P
     477252-15-6P 477252-16-7P 477252-21-4P
     477252-22-5P 477252-23-6P 477252-24-7P
     477252-25-8P 477252-26-9P 477252-27-0P
     477252-28-1P 477252-30-5P 477252-31-6P
     477252-32-7P 477252-33-8P 477252-34-9P
     477252-35-0P 477252-36-1P 477252-39-4P
     477252-40-7P 477252-41-8P 477252-43-0P
     477252-64-5P 477252-65-6P 694489-50-4P
     694489-52-6P 694489-53-7P 694489-54-8P
     694489-55-9P 694489-56-0P 694489-57-1P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (one-pot method of preparation of naphthyridine derivs. useful as inhibitors
        of phosphodiesterase-4)
RN
     477251-76-6 CAPLUS
     1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
CN
     dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)
```

RN 477251-82-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (9CI) (CA INDEX NAME)

RN 477251-83-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

$$H_2N-S$$
 O
 N
 N
 O
 C
 C
 N

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(9CI)(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & & \\ Me-S-CH_2 & & \\ O & & N & O \\ \hline & O & & \\ O & & & \\ \end{array}$$

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-64-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-50-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-52-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 694489-53-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-54-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 694489-55-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 694489-56-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 694489-57-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3'-(1,6-dihydro-6-oxo-3-pyridinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

IT 701263-25-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(one-pot method of preparation of naphthyridine derivs. useful as inhibitors of phosphodiesterase-4)

RN 701263-25-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]- (9CI) (CA INDEX NAME)

IT 477252-46-3P 477252-47-4P 477252-48-5P 477252-49-6P 477252-50-9P 477252-51-0P 477252-53-2P 477252-54-3P 477252-55-4P

RN 477252-47-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-48-5 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-

1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 694489-58-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(3,5-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo-(9CI) (CA INDEX NAME)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:906219 CAPLUS

DOCUMENT NUMBER: 138:4594

TITLE: Preparation of 1-biaryl-[1,8]naphthyridin-4-one

phosphodiesterase IV inhibitors for treatment of

asthma and inflammation

INVENTOR(S): Guay, Daniel; Girard, Mario; Hamel, Pierre; Laliberte,

Sebastien; Friesen, Richard; Girard, Yves; Li, Chun

PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.

SOURCE: PCT Int. Appl., 166 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT 1	NO.			KIN	D :	DATE			APPL:	ICAT:	ION 1	.OV		Di	ATE		
					- ·												
WO 2002094823		A1	A1 20021128			1	WO 2002-CA746					20020522					
₩:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB.	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	KZ,	LC,	LK,	LR,	LS,	
	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	PL,	
	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM

```
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
               BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2447765
                             AA
                                    20021128
                                                  CA 2002-2447765
                                                                            20020522
     EP 1397359
                                    20040317
                                                  EP 2002-727127
                                                                            20020522
                             A1
     EP 1397359
                             В1
                                    20050831
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004534773
                             T2
                                    20041118
                                                  JP 2002-591496
                                                                            20020522
     AT 303384
                             Е
                                    20050915
                                                  AT 2002-727127
                                                                            20020522
     US 2003096829
                             A1
                                    20030522
                                                  US 2002-154591
                                                                            20020524
     US 6677351
                             B2
                                    20040113
PRIORITY APPLN. INFO.:
                                                  US 2001-293247P
                                                                         Ρ
                                                                            20010524
                                                  WO 2002-CA746
                                                                            20020522
OTHER SOURCE(S):
                            MARPAT 138:4594
```

GΙ

$$R^{5}$$
 R^{4}
 R^{1}
 R^{7}
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{5}
 R^{6}
 R^{1}
 R^{7}
 R^{2}
 R^{3}
 R^{3}
 R^{3}
 R^{4}
 R^{5}
 R^{6}
 R^{7}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{7}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5}
 R^{5}
 R^{7}
 R^{2}
 R^{3}
 R^{4}
 R^{5}
 R^{5

Title compds. I [wherein Ar = Ph, pyridyl, pyrimidyl, indolyl, quinolinyl, AB thienyl, pyridonyl, oxazolyl, oxadiazolyl, thiadiazolyl, imidazolyl, or heteroaryl oxides; R = H or alkyl; R1 = H or (un)substituted (cyclo)alkyl, alkoxy, alkenyl, alkynyl, heteroaryl, or heterocyclyl; R2 = H, halo, (cyclo) alkyl, alkoxy, amino, acyl, alkoxycarbonyl, alkylsulfamoyl, alkylsulfonyl, or (un)substituted Ph, heteroaryl, or heterocyclyl, etc.; R3 = H, OH, NH2, halo, (un) substituted alkyl; R4-R7 = independently H, halo, NH2, or (un) substituted alkyl or alkoxy; or pharmaceutically acceptable salts thereof| were prepared as phosphodiesterase IV (PDE4) inhibitors for the treatment of asthma and inflammation. For instance, Et 3-(3-bromoanilino)-2-(2-chloronicotinoyl)acrylate was cyclized using NaH in THF and the resulting ester saponified to give 1-(3-bromopheny1)-1,4dihydro-[1,8]naphthyridin-4-one-3-carboxylic acid. Amidation with isopropylamine, followed by treatment with 3-acetylphenylboronic acid in the presence of trans-PdBr2(PPh3)2 and Na2CO3 in toluene and EtOH gave II. I demonstrated PDE4 inhibitory activity by suppression of $TNF-\alpha$ secretion in LPS stimulated human blood with IC50 values generally ranging from $0.005~\mu\text{M}$ to $15.4~\mu\text{M}$. In a SPA based PDE activity assay, I inhibited the hydrolysis of cAMP to AMP by human recombinant phosphodiesterase IVa with IC50 values between 34.3 nM and 134.0 nM. IT477251-93-59, N-Isopropyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4dihydro-[1,8]naphthyridine-3-carboxamide 477251-87-9P, N-Isopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477251-91-5P, N-(2,6-Dichloropyridin-4-yl)-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8] naphthyridine-3-carboxamide 477251-92-6P,

RN

CN

```
N-Isopropyl-1-[3-[4-[4-(tert-butyloxycarbonyl)piperazin-1-
yl]phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477251-93-7P, N-Isopropyl-1-[3-(quinolin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477251-95-9P,
N-Cyclopropyl-1-[3-(pyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477251-97-1P,
N-Isopropyl-1-[3-(5-methylthiopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477251-99-3P,
N-Cyclopropyl-1-[3-(4-hydroxymethylphenyl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-00-9P,
N-Cyclopropyl-1-[3-(pyridin-4-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-01-0P,
N-Cyclopropyl-1-[3-(4-ethylthiophenyl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-05-4P,
N-Isopropyl-1-[3-(4-methylthiophenyl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-07-6P,
N-Isopropyl-1-[3-(5-carboethoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-08-7P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-09-8P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-11-2P,
N-Isopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-23-6P,
N-Cyclopropyl-1-[3-(6-methylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-25-8P,
N-Cyclopropyl-1-[3-(5-bromopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-26-9P,
N-Cyclopropyl-1-[3-(6-benzyloxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-31-6P,
N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-32-7P,
N-Cyclopropyl-1-[5-bromo-3-[6-(1-hydroxy-1-methylethyl)pyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-35-0P, N-Cyclopropyl-1-[3-(6-methylsulfonylpyridin-3-
yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-43-0P, N-Cyclopropyl-1-[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
   (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by
   cyclization and arylation of (arylamino) (nicotinoyl) acrylates for
   treatment of asthma and inflammation)
477251-83-5 CAPLUS
1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-
dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)
```

RN 477251-87-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-91-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-92-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[3'-[3-[[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl][1,1'-biphenyl]-4-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN 477251-93-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(3-quinolinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-95-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477251-97-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylthio)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-99-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-00-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(4-pyridinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-01-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylthio)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-05-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylthio)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-07-6 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 477252-08-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-09-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-11-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-23-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-25-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-26-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(phenylmethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-31-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-32-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-35-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-43-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

```
IT
     477251-76-6P, N-Isopropyl-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4-
     dihydro-[1,8]naphthyridine-3-carboxamide 477251-80-2P,
     N-(2,6-Dichloropyridin-4-yl)-1-[3-(3-acetylphenyl)phenyl]-4-oxo-1,4-
     dihydro-[1,8] naphthyridine-3-carboxamide 477251-82-4P,
     N-Isopropyl-1-[3-(4-n-propylphenyl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477251-84-6P,
     N-Isopropyl-1-[3-(2-methylphenyl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477251-85-7P,
     N-Isopropyl-N-methyl-1-[3-(4-acetylphenyl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477251-88-0P,
     N-Isopropyl-1-[3-(indol-5-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-
     3-carboxamide 477251-89-1P, N-tert-Butyl-1-[3-(4-
     acetylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
     477251-94-8P, N-Isopropyl-1-[3-(pyrimidin-5-yl)phenyl]-4-oxo-1,4-
     dihydro-[1,8]naphthyridine-3-carboxamide 477252-02-1P,
     N-Cyclopropyl-1-[3-(3-thienyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-
     3-carboxamide 477252-03-2P, N-Cyclopropyl-1-[3-(4-
     sulfamoylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
     477252-04-3p, N-Isopropyl-1-[3-(3-ethoxyphenyl)phenyl]-4-oxo-1,4-
     dihydro-[1,8]naphthyridine-3-carboxamide 477252-06-5P,
     N-Isopropyl-1-[3-(3-acetyl-4-hydroxyphenyl)phenyl]-4-oxo-1,4-dihydro-
     [1,8] naphthyridine-3-carboxamide 477252-10-1P,
     N-Isopropyl-1-[3-(5-acetylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477252-12-3P,
     N-Cyclopropyl-1-[3-(1-oxidopyrimidin-5-yl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477252-13-4P,
     1-[3-[6-(1-Hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
     dihydro-[1,8]naphthyridine-3-carboxamide 477252-14-5P,
     N-Isopropyl-1-[3-[4-(pyridin-3-yl)phenyl]phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477252-15-6P,
     N-Cyclopropyl-1-[3-(5-methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
     [1,8]naphthyridine-3-carboxamide 477252-16-7P,
     N-Cyclopropyl-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxidopyridin-2-
     yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
     477252-17-8P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-
     methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
     carboxamide 477252-18-9P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
     methylethyl)pyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
```

```
carboxamide 477252-19-0P, N-Cyclopropyl-1-[3-[3-(1-hydroxy-1-
methylethyl)-1-oxidopyridin-4-yl]phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-21-4P,
N-Cyclopropyl-1-[3-(6-isopropylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-22-5P,
N-Cyclopropyl-1-[3-(6-methoxypyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-24-7P,
N-Cyclopropyl-1-[3-[6-(2,2,2-trifluoroethoxy)pyridin-3-yl]phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-27-0P,
N-Cyclopropyl-1-[3-[6-dicyclopropyl(hydroxy)methyl-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-28-1P, N-Cyclopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-
oxidopyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-30-5p, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-33-8P, N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-
methylethyl)pyridin-2-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-34-9P, N-Isopropyl-1-[3-(4-
methylsulfonylphenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-36-1P, N-Isopropyl-1-[3-(5-
methylsulfonylpyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-37-2P, N-Cyclopropyl-1-[3-(4-
ethylsulfonylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-38-3P, N-Cyclopropyl-1-[3-(4-
ethylsulfinylphenyl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-39-4P, N-Isopropyl-1-[3-[4-(1-
oximidoethyl)phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-40-7P, N-Isopropyl-1-[3-[4-(piperazin-1-
yl)phenyl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-41-8p, N-Cyclopropyl-1-[3-[4-(methylsulfonylmethyl)phenyl]p
henyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-42-9P, N-Cyclopropyl-1-[3-(1,6-dihydro-6-oxopyridin-3-
yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-44-1P, N-Isopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-
1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-45-2P,
N-(2,6-Dichloropyridin-4-yl)-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-46-3P,
N-Isopropyl-1-[3-(5-carboethoxy-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-47-4P,
N-Isopropyl-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-
4-oxo-1, 4-dihydro-[1,8] naphthyridine-3-carboxamide 477252-48-5P,
N-Isopropyl-1-[3-[6-(2-methylpropyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-
dihydro-[1,8]naphthyridine-3-carboxamide 477252-49-6P,
N-Isopropyl-1-[3-(6-methyl-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-50-9P,
N-Cyclopropyl-1-[3-(1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8] naphthyridine-3-carboxamide 477252-51-0P,
N-Cyclopropyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide
477252-53-2P, N-Cyclopropyl-1-[3-(1-oxidopyridin-4-yl)phenyl]-4-
oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-54-3P,
N-Cyclopropyl-1-[3-(5-bromo-1-oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-55-4P,
N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-
yl]pyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
carboxamide 477252-56-5P, N-Cyclopropyl-1-[[3-[5-[6-(1-hydroxy-1-
methylethyl)pyridin-3-yl]-1-oxidopyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-
[1,8]naphthyridine-3-carboxamide 477252-57-6P,
N-Cyclopropyl-1-\{[3-[5-[6-(1-hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]-1-
oxidopyridin-3-yl]phenyl]]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-
```

RN CN carboxamide 477252-58-7P, N-Isopropyl-1-[3-(1-oxidoquinolin-3yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-59-8P, N-Isobutyl-1-[3-[6-(1-hydroxy-1-methylethyl)-1oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3carboxamide 477252-60-1P, N-Cyclopropyl-1-[3-(6-methyl-1oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3carboxamide 477252-61-2P, N-Cyclopropyl-1-[3-(6-methylsulfonyl-1oxidopyridin-3-yl)phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3carboxamide 477252-62-3P, N-Cyclopropyl-1-[5-bromo-3-[6-(1hydroxy-1-methylethyl)-1-oxidopyridin-3-yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-63-4P, N-Cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxidopyridin-3yl]phenyl]-4-oxo-1,4-dihydro-[1,8]naphthyridine-3-carboxamide 477252-64-5P 477252-65-6P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (PDE4 inhibitor; preparation of biarylnaphthyridinone PDE4 inhibitors by cyclization and arylation of (arylamino) (nicotinoyl) acrylates for treatment of asthma and inflammation) 477251-76-6 CAPLUS 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-1,4dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-80-2 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl[1,1'-biphenyl]-3-yl)-N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-82-4 CAPLUS
CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-(4'-propyl[1,1'-biphenyl]-3-yl)- (9CI) (CA INDEX NAME)

RN 477251-84-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-(2'-methyl[1,1'-biphenyl]-3-yl)-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-85-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-methyl-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-88-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-(1H-indol-5-yl)phenyl]-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477251-89-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(4'-acetyl[1,1'-biphenyl]-3-yl)-N-(1,1-dimethylethyl)-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477251-94-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[3-(5-pyrimidinyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-02-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-(3-thienyl)phenyl]- (9CI) (CA INDEX NAME)

RN 477252-03-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[4'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

$$H_2N-S$$
 N
 N
 N
 $C-NH$

RN 477252-04-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-ethoxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-06-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-(3'-acetyl-4'-hydroxy[1,1'-biphenyl]-3-yl)-1,4-dihydro-N-(1-methylethyl)-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-10-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-acetyl-3-pyridinyl)phenyl]-1,4-dihydro-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-12-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-5-pyrimidinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-13-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-14-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(3-pyridinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-15-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-16-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[4-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-17-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-18-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-19-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[3-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX

NAME)

RN 477252-21-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-[(1-methylethyl)sulfonyl]-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-22-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methoxy-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-24-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-4-oxo-1-[3-[6-(2,2,2-trifluoroethoxy)-3-pyridinyl]phenyl]- (9CI) (CA INDEX NAME)

RN 477252-27-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(dicyclopropylhydroxymethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-28-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-30-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-33-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-2-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-34-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[4'-(methylsulfonyl)[1,1'-biphenyl]-3-yl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-36-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[5-(methylsulfonyl)-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-37-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfonyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-38-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[4'-(ethylsulfinyl)[1,1'-biphenyl]-3-yl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-39-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[4'-[1-(hydroxyimino)ethyl][1,1'-biphenyl]-3-yl]-N-(1-methylethyl)-4-oxo-(9CI)(CA INDEX NAME)

RN 477252-40-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-4-oxo-1-[4'-(1-piperazinyl)[1,1'-biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

RN 477252-41-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[4'-[(methylsulfonyl)methyl][1,1'-biphenyl]-3-yl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-42-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-(1,6-dihydro-6-oxo-3-pyridinyl)phenyl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-44-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-45-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-(2,6-dichloro-4-pyridinyl)-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-46-3 CAPLUS

CN 3-Pyridinecarboxylic acid, 5-[3-[3-[(1-methylethyl)amino]carbonyl]-4-oxo-1,8-naphthyridin-1(4H)-yl]phenyl]-, ethyl ester, 1-oxide (9CI) (CA INDEX NAME)

RN 477252-47-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[5-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(1-methylethyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-48-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-[6-(2-methylpropyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-49-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-50-9 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-51-0 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-53-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(1-oxido-4-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-54-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-(5-bromo-1-oxido-3-pyridinyl)phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-55-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1'-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-56-5 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1-oxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-57-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6'-(1-hydroxy-1-methylethyl)-1,1'-dioxido[3,3'-bipyridin]-5-yl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-58-7 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-N-(1-methylethyl)-1-[3-(1-oxido-3-quinolinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-59-8 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1,4-dihydro-1-[3-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-(2-methylpropyl)-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-60-1 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-(6-methyl-1-oxido-3-pyridinyl)phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-61-2 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[6-(methylsulfonyl)-1-oxido-3-pyridinyl]phenyl]-4-oxo-(9CI) (CA INDEX NAME)

RN 477252-62-3 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, 1-[3-bromo-5-[6-(1-hydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-N-cyclopropyl-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-63-4 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1-[3-[6-(1,2-dihydroxy-1-methylethyl)-1-oxido-3-pyridinyl]phenyl]-1,4-dihydro-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-64-5 CAPLUS

.CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-1-oxido-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

RN 477252-65-6 CAPLUS

CN 1,8-Naphthyridine-3-carboxamide, N-cyclopropyl-1,4-dihydro-1-[3-[2-(1-hydroxy-1-methylethyl)-4-pyridinyl]phenyl]-4-oxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>